DETERMINING DESIRED PSEUDOLITE LOCATIONS BASED ON PREDICTED GPS COVERAGE
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Fig. 1.

100

102

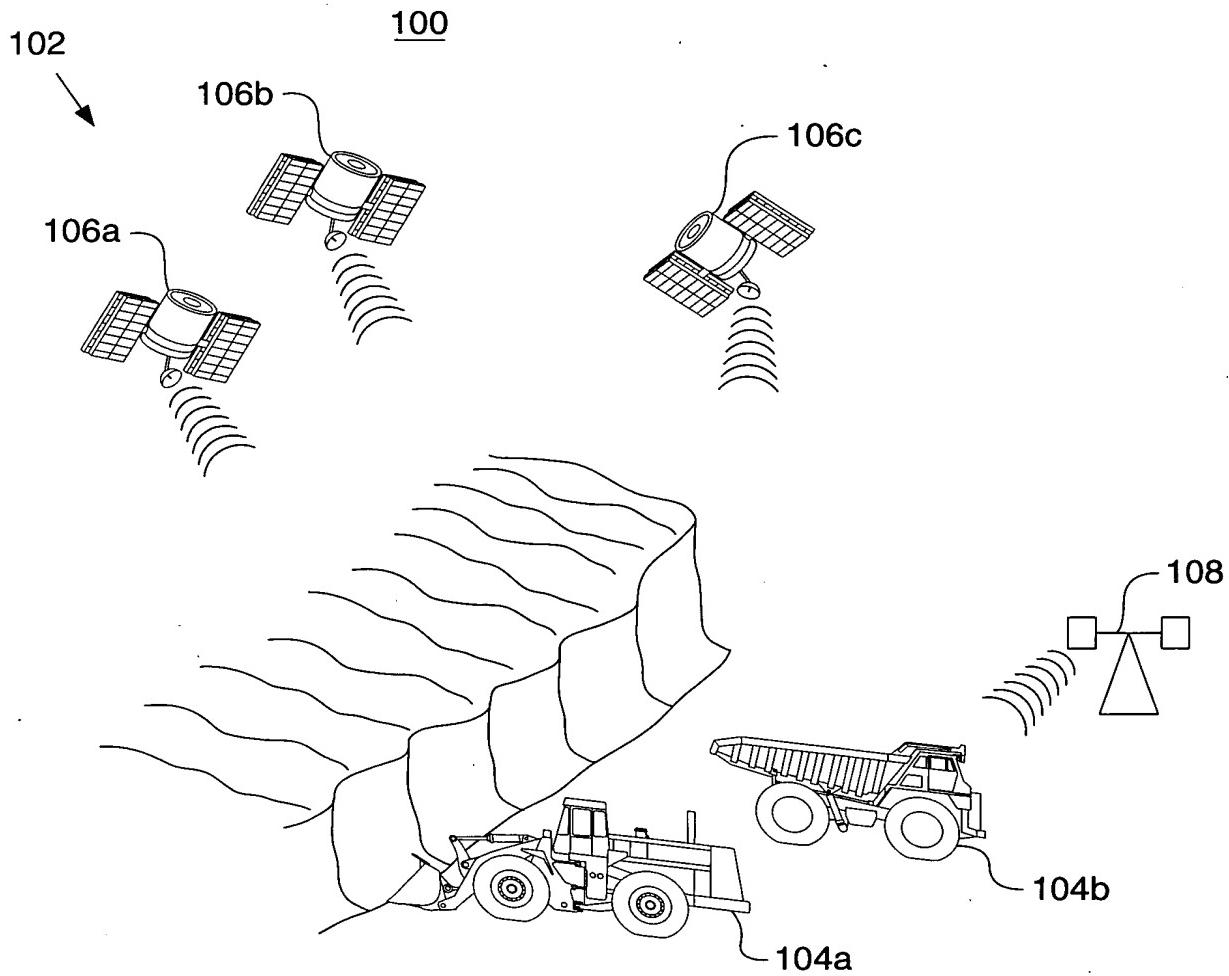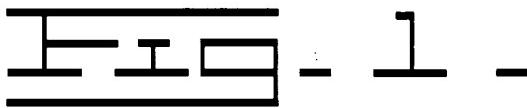106b

106c

106a

108

104b

104a

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Fig_2_

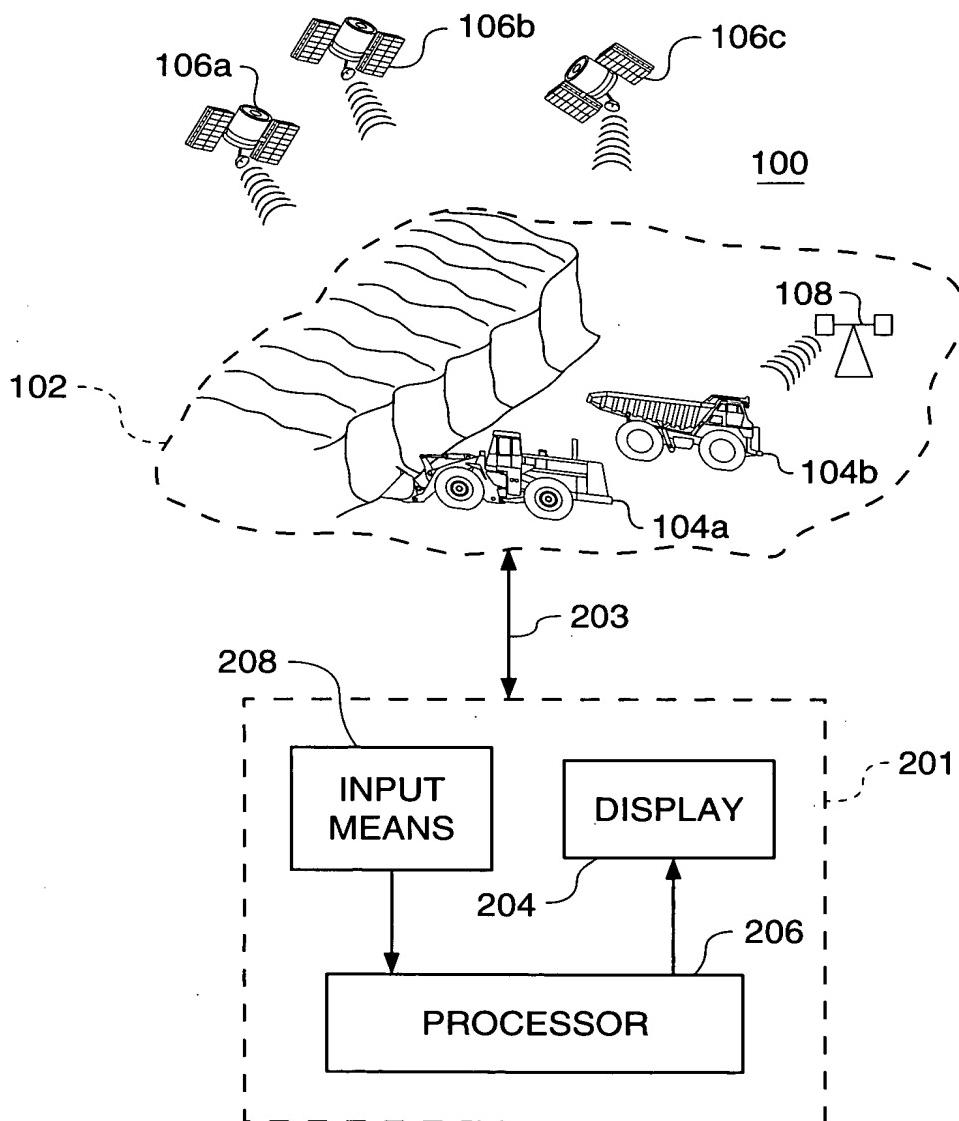DETERMINING DESIRED PSEUDOLITE LOCATIONS BASED ON PREDICTED GPS COVERAGE
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Fig. 3.

204

302

306

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Fig-4-

START

↓

402

PREDICT AREA OF COVERAGE OF SITE
BY AT LEAST ONE GPS SATELLITE

↓

404

DETERMINE CONDITION OF REDUCED COVERAGE
AS FUNCTION OF PREDICTED AREA OF COVERAGE

↓

406

DISPLAY AREA HAVING REDUCED
COVERAGE ON TERRAIN MAP

↓

408

PLACE PSEUDOLITE AT LOCATION AT SITE TO PROVIDE
COVERAGE IN AREA HAVING REDUCED COVERAGE

↓

410

DISPLAY AREA OF COVERAGE OF
PSEUDOLITE ON TERRAIN MAP

↓

412

MOVE PSEUDOLITE TO NEW LOCATION IN RESPONSE
TO AREA OF COVERAGE OF PSEUDOLITE NOT
COVERING AREA HAVING REDUCED COVERAGE

↓

STOP

DETERMINING DESIRED PSEUDOLITE LOCATIONS BASED ON PREDICTED GPS COVERAGE
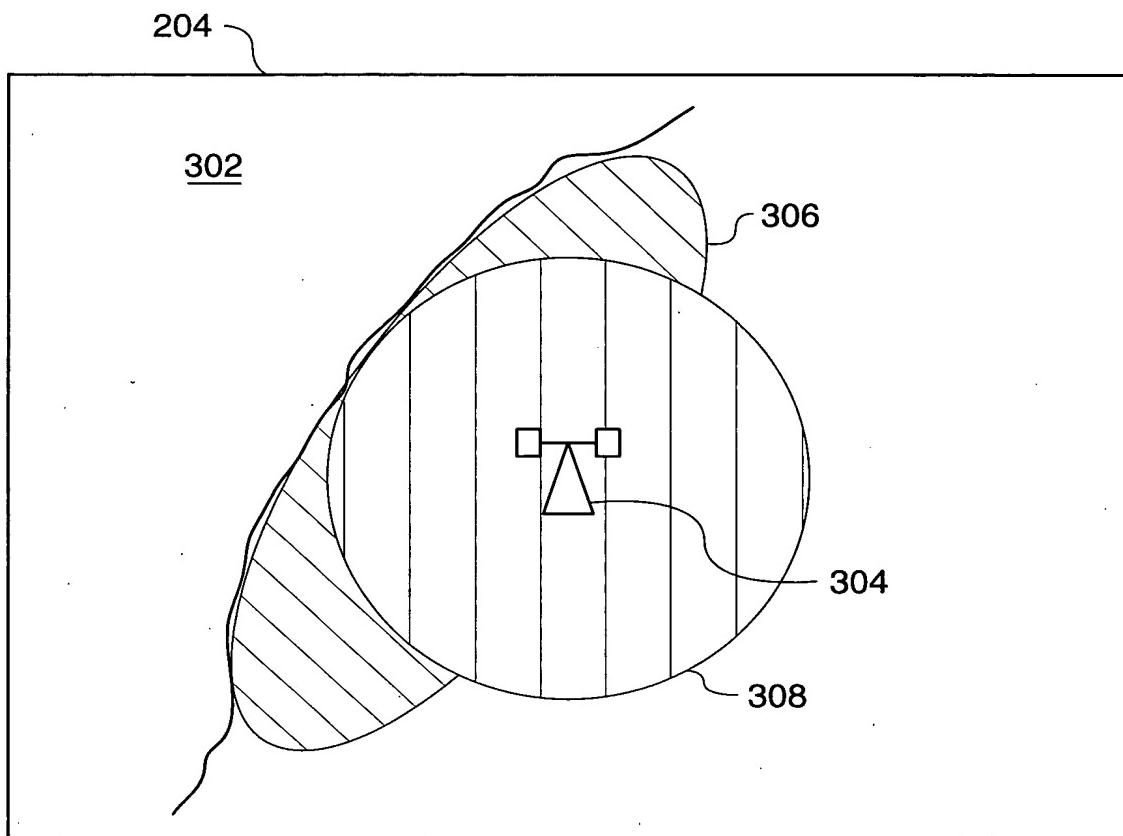James J. Kalafut, et al.
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Fig. 5.

START

DETERMINE RANGE OF LEVELS OF COVERAGE
OF AT LEAST ONE GPS SATELLITE — 502

DISPLAY AREAS ON TERRAIN MAP HAVING AT
LEAST ONE LEVEL OF COVERAGE IN THE RANGE — 504

DETERMINE CHANGES IN THE LEVELS OF COVERAGE OF
THE AREAS AS A FUNCTION OF A PROGRESSION OF TIME — 506

DISPLAY CHANGES IN THE LEVELS OF COVERAGE
AS A FUNCTION OF INCREASING AND DECREASING
COVERAGE DURING THE PROGRESSION OF TIME — 508

STOP

DETERMINING DESIRED PSEUDOLITE LOCATIONS BASED ON PREDICTED GPS COVERAGE
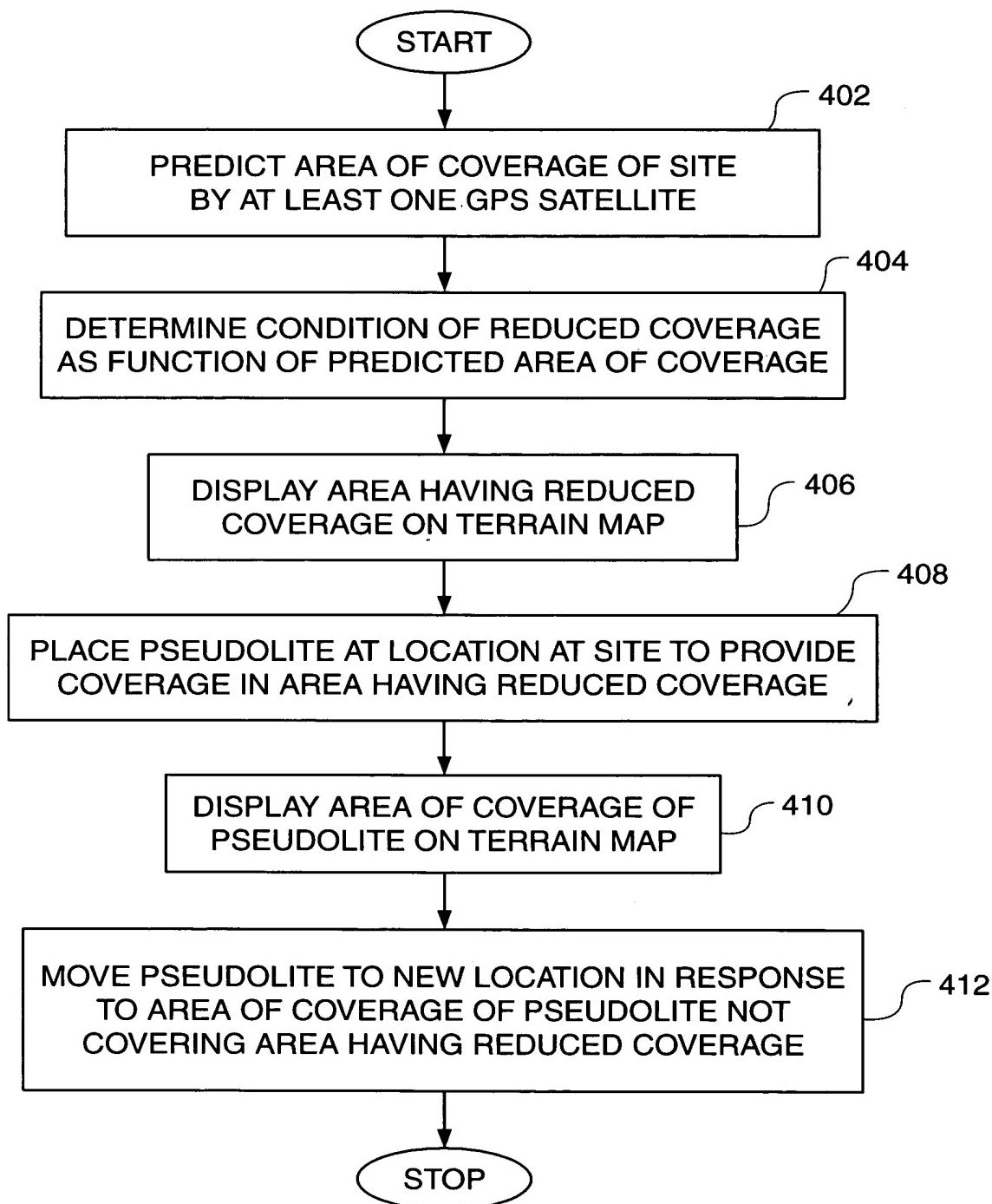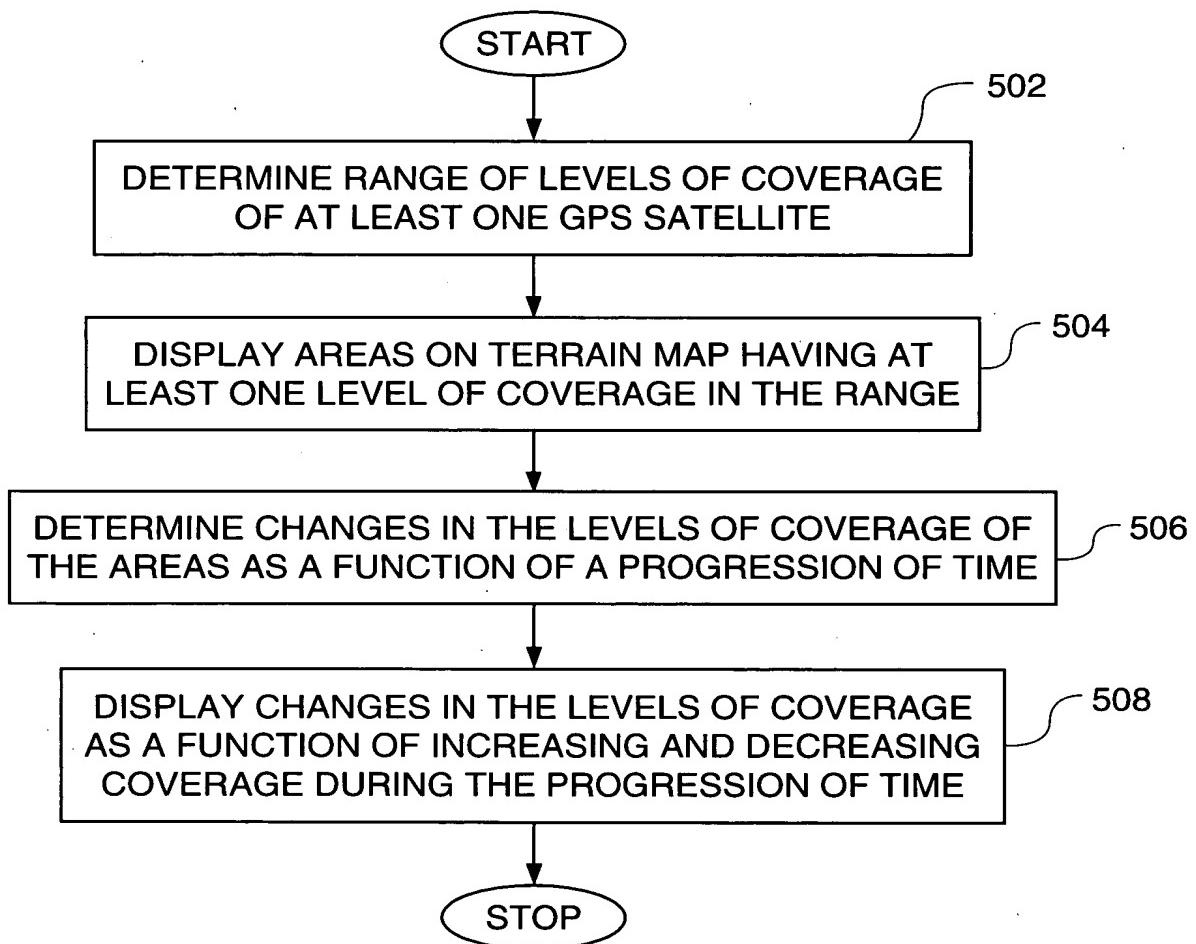James J. Kalafut, et al.
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Fig. 6.

START — 602

PREDICT AREA OF COVERAGE OF SITE BY PLURALITY OF GPS SATELLITES — 602

DETERMINE CONDITION OF REDUCED COVERAGE AS FUNCTION OF PREDICTED AREA OF COVERAGE — 604

DISPLAY AREA HAVING REDUCED COVERAGE ON TERRAIN MAP — 606

PLACE PSEUDOLITE MODEL ON TERRAIN MAP AT DESIRED LOCATION — 608

DISPLAY AREA OF COVERAGE OF PSEUDOLITE MODEL ON TERRAIN MAP — 610

DISPLAY CHANGE IN COVERAGE OF AREA HAVING REDUCED COVERAGE AS FUNCTION OF AREA OF COVERAGE OF PSEUDOLITE MODEL — 612

MOVE PSEUDOLITE MODEL TO SECOND LOCATION ON TERRAIN MAP — 614

DISPLAY REVISED AREA OF COVERAGE OF PSEUDOLITE MODEL ON TERRAIN MAP — 616

DISPLAY REVISED CHANGE IN COVERAGE OF AREA HAVING REDUCED COVERAGE AS FUNCTION OF AREA OF COVERAGE OF PSEUDOLITE MODEL — 618

PLACE PSEUDOLITE AT LOCATION AT SITE CORRESPONDING TO DESIRED LOCATION OF PSEUDOLITE MODEL — 620

STOP

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Fig. 7.

START

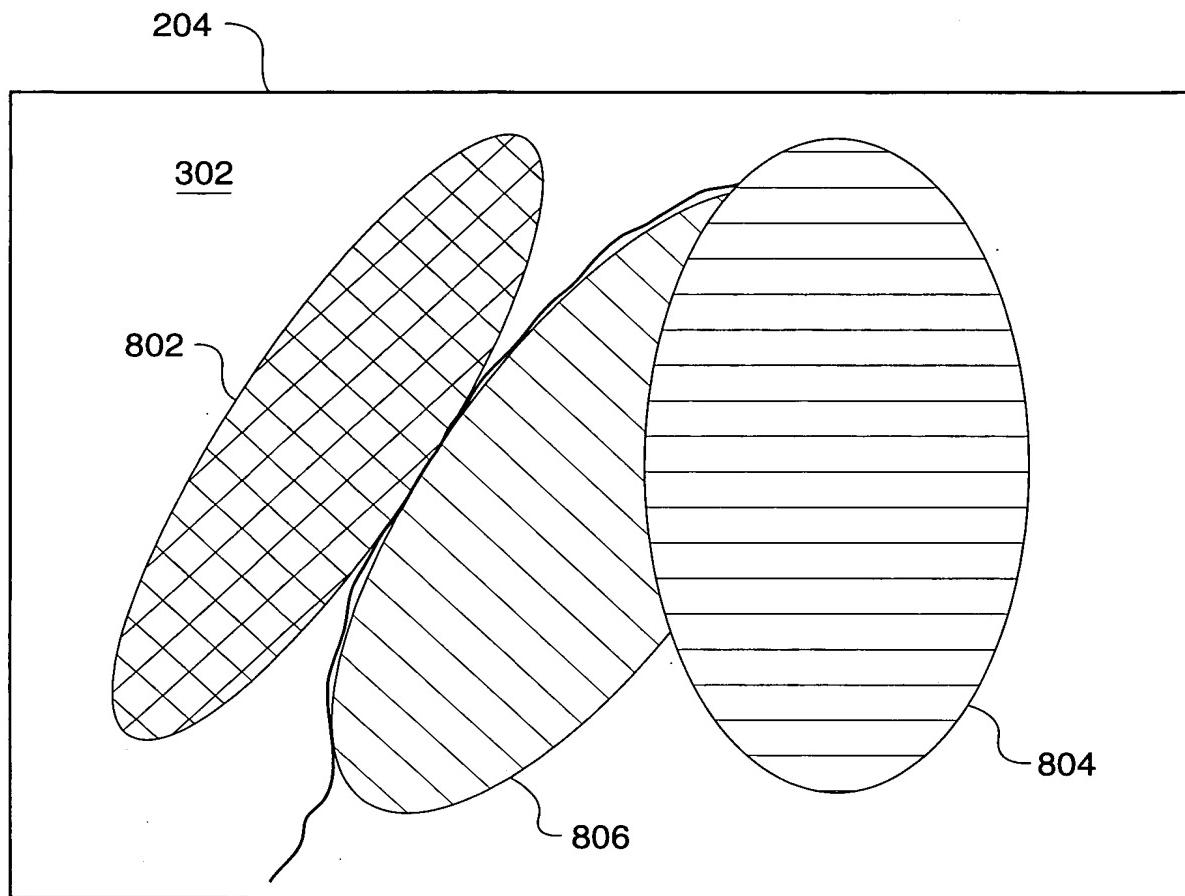PREDICT AREAS OF COVERAGE OF SITE
BY PLURALITY OF GPS SATELLITES — 702

DETERMINE CONDITION OF AT LEAST ONE AREA
AT SITE HAVING REDUCED COVERAGE AS
FUNCTION OF PREDICTED AREAS OF COVERAGE — 704

DISPLAY AREAS ON TERRAIN MAP — 706

DETERMINE OPTIMAL LOCATION OF AT LEAST ONE
PSEUDOLITE MODEL AS FUNCTION OF REDUCED
COVERAGE OF THE AT LEAST ONE AREA — 708

DISPLAY THE AT LEAST ONE PSEUDOLITE MODEL
AT OPTIMAL LOCATION ON TERRAIN MAP — 710

UPDATE TERRAIN MAP DISPLAY TO INDICATE REVISED
COVERAGE IN THE AREAS AS FUNCTION OF COVERAGE OF
GPS SATELLITES AND THE AT LEAST ONE PSEUDOLITE MODEL — 712

PLACE AT LEAST ONE PSEUDOLITE AT LOCATION AT
SITE CORRESPONDING TO DESIRED LOCATION OF
THE AT LEAST ONE PSEUDOLITE MODEL — 714

STOP

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Fig. 8.

204

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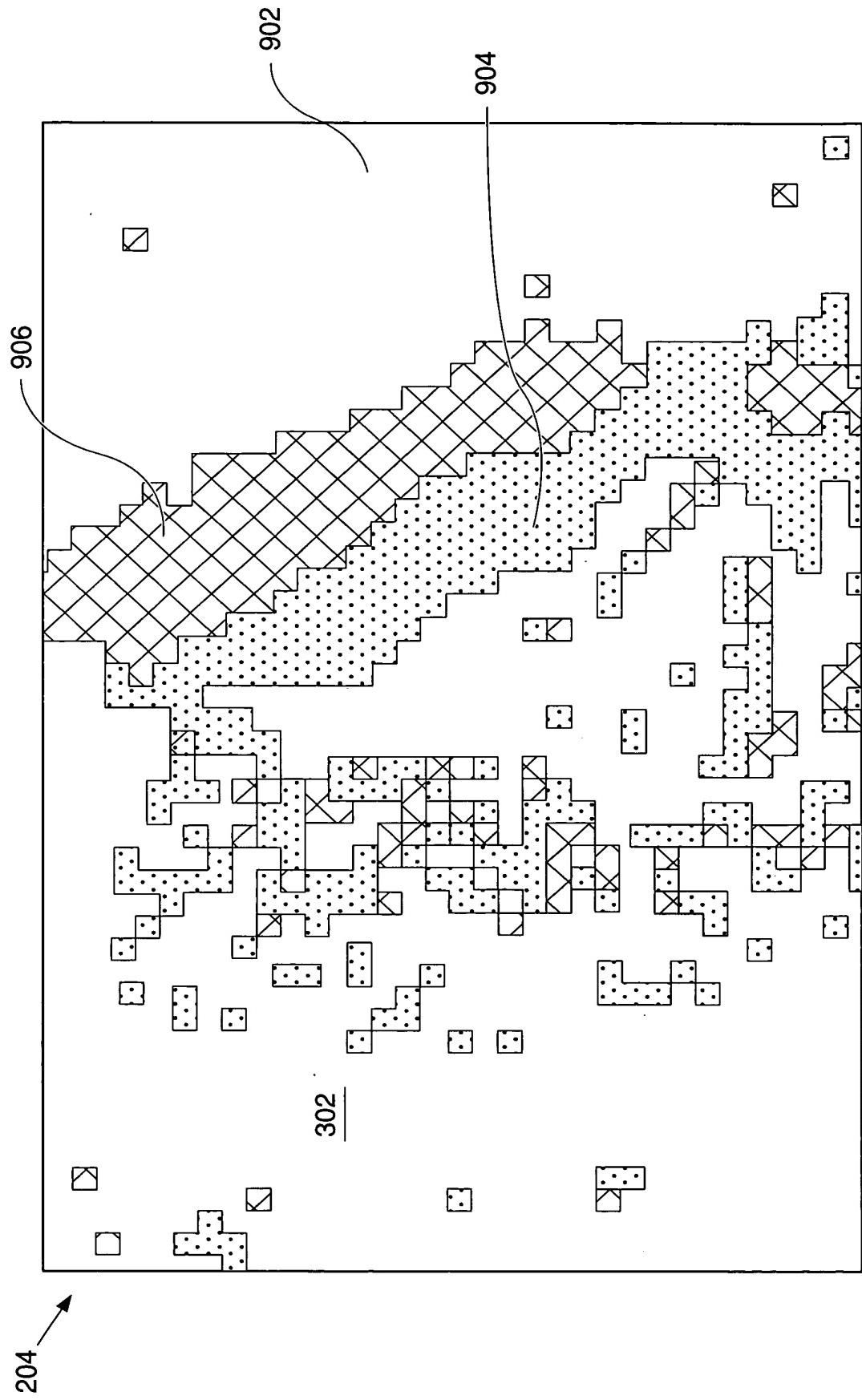802

804

806

DETERMINING DESIRED PSEUDOLITE LOCATIONS BASED ON PREDICTED GPS COVERAGE
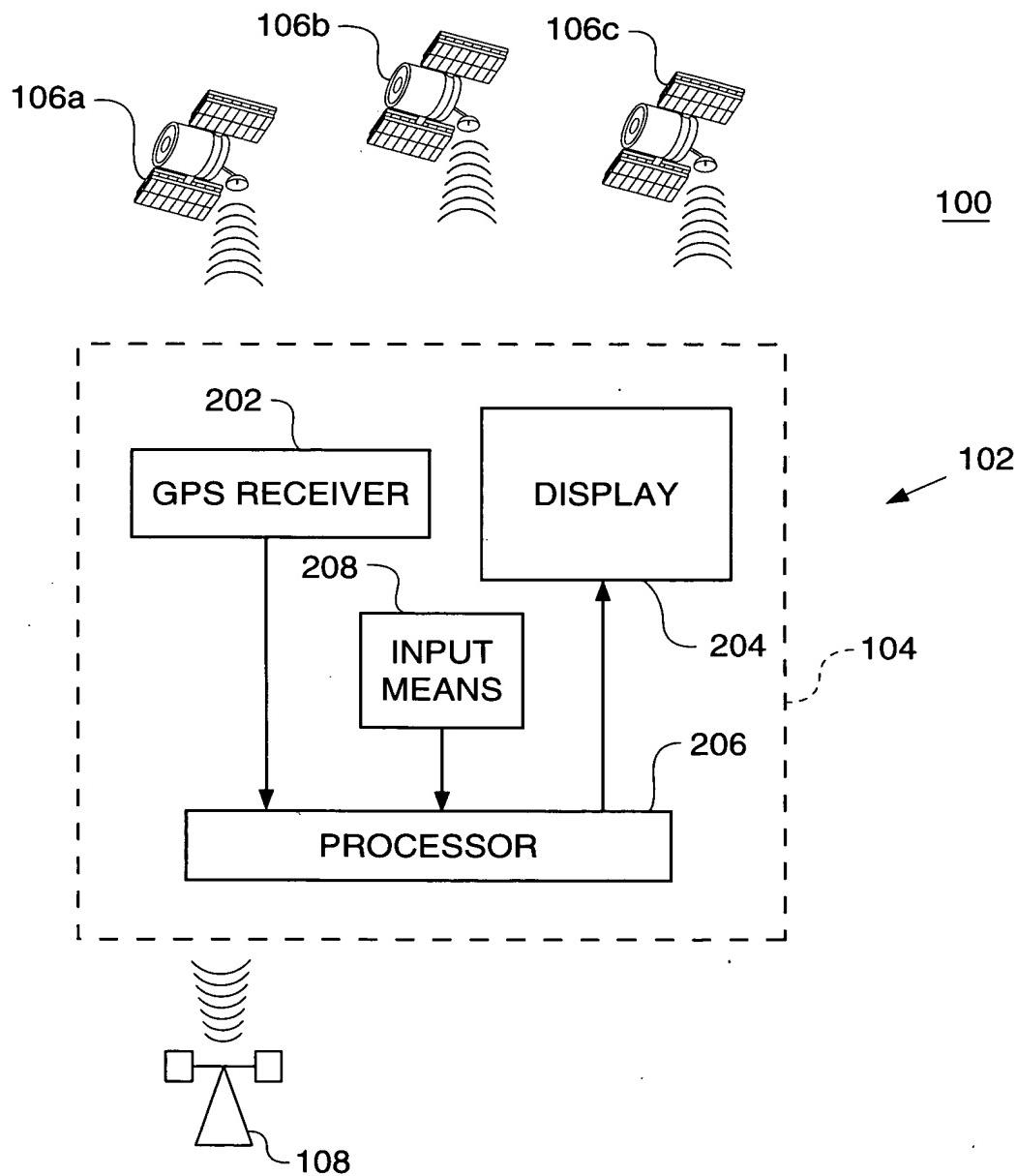James J. Kalafut, et al.
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Fig. 9

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Fig. 10.

106a 106b 106c

100

102

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GPS RECEIVER 202

DISPLAY 204

INPUT MEANS 208

PROCESSOR 206

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